

**California Bay-Delta Authority
In-Delta Storage Program
State Feasibility Study**

**Public Comments
April 2004**

This document was prepared by DWR staff to organize specific public comments into categories. The comments contained in this document have been extracted directly from, and are written as they appear in, the original comment letters. General information from the comment letters is not included in this document. Some specific comments address multiple issues; therefore, they have been placed in multiple categories at the discretion of DWR staff. An index of the comment categories is provided below.

Index of Comments

Comment Category	Page Number
Operations	1
Water Quality	6
Economics	15
Engineering	23
Navigation	29
Agricultural	30
Recreation	34
Risk Analysis	36
Miscellaneous	39

Comment letters were received from the following agencies and organizations:

- Bay Area Water Supply & Conservation Agency (BAWSCA)
- California Business Properties Association (CBPA)
- California Business Roundtable
- California Chamber of Commerce
- California Council for Environmental and Economic Balance
- California Farm Bureau Federation
- California Legislature
- California State Senate
- California Teamsters Public Affairs Council
- California Urban Water Agencies (CUWA)
- California Waterfowl Association (CWA)
- California-Nevada Conference of Operating Engineers
- Central Delta Water Agency (CDWA) & South Delta Water Agency (SDWA)
- Contra Costa Water District (CCWD)
- Delta Wetlands Project
- Department of Conservation, State of California
- Department of Transportation, State of California (CALTRANS)
- Ducks Unlimited
- East Bay Municipal Utility District (EBMUD)
- Natural Heritage Institute
- Northern California Water Association (NCWA)
- Pacific Gas and Electric Company (PG&E)
- Peter Margiotta
- Placer County Water Agency (PCWA) & Recreational Boaters of California (RBOC)
- Port of Stockton
- San Joaquin River Group Authority (SJRGAA)
- San Luis & Delta-Mendota Water Authority, Westlands Water District
- Santa Clara Valley Water District (SCVWD)
- Silicon Valley Manufacturing Group (SVMG)
- State Water Contractors (SWC)

Abbreviations and Acronyms

B

BAWSCA Bay Area Water Supply & Conservation Agency

C

CALTRANS California Department of Transportation
CBPA California Business Properties Association
CCWD Contra Costa Water District
CDWA Central Delta Water Agency
CUWA California Urban Water Agencies
CWA California Waterfowl Association

E

EBMUD East Bay Municipal Utility District

N

NCWA Northern California Water Association

P

PCWA Placer County Water Agency
PG&E Pacific Gas and Electric Company

R

RBOC Recreational Boaters of California

S

SCVWD Santa Clara Valley Water District
SDWA South Delta Water Agency
SJRG San Joaquin River Group Authority
SVMG Silicon Valley Manufacturing Group
SWC State Water Contractors

Comment Reference Number	Commenting Agency/ Group	Comments
OPERATIONS		
1	CUWA (this comment also included in Water Quality)	Chapter 2 of the Water Quality Report shows that the In-Delta Storage circulation alternative significantly violates the CUWA Water Quality Management Plan (WQMP) limitations placed on changes to organic carbon concentrations at urban intakes. A useful summary of these violations may be found in Table 2.5.10 on page 68. Note that under the circulation alternative Bacon Island releases water 55% of the time (Table 2.4.3). It is reasonable to assume that violations of the WQMP organic carbon standards at the export pumps caused by the project are a result of releases rather than diversions. Preliminary analyses confirm this point (M. Mierzwa, DWR, personal communication with R. Losee, MWD). From Table 2.5.10, 33% of the time the project will cause organic carbon violations at Banks; that is, 60% of the time water is released from Bacon Island, the project will be in violation. The In-Delta Storage operation was developed through CALSIM II modeling, as summarized in the Operations Report. Therefore, a feasible operations study has yet to be developed and the project yield numbers presented in the Operations Report are not supported. This review is focused on the DOC water quality modeling, with less emphasis on the operations modeling and dissolved oxygen modeling.
2	CUWA	<p>Operations Report:</p> <p>Section 1.4 Key Findings and Recommendations (pages 3-4)</p> <p>Bullet 5 states, “Due to strategic location of the In-Delta Storage reservoirs, immediate actions can be taken for salinity control. The reservoirs have a favorable impact to the location of the X2 line in the Delta.” This finding was not validated through modeling studies and contradicts statements made in Section 5.3.6 (page 40). For example, Section 5.3.6 states “The CALSIM results indicate that the project’s impact to X2 position and salinity are negligible.”</p> <p>Bullet 6 states, “DOC water quality problems can be diluted, with minor impacts to water supplies, using circulation operations.” This finding was not validated through modeling studies, as discussed in the overall conclusions above.</p>
3	CUWA	Operations Report:

		<p>Section 3.4 Reiterations with DSM2 Model (page 15) – According to Section 4.4.1 on page 21, Study 4a (no circulation) reservoir diversion water quality was generated from Study 1 (no action base). While not explicitly stated, we assume that the same reservoir diversion water quality was used for Study 4b (circulation). Such an approximation may be reasonable for Study 4a, as ambient conditions would return to baseline conditions soon after the reservoir releases were made. But under Study 4b assumptions of frequent circulation, ambient conditions rarely return to baseline conditions. Therefore, such an approximation would be faulty for Study 4b.</p>
4	CUWA	<p>Operations Report:</p> <p>Section 5.4.2 Organic Carbon Evaluation (pages 41-55)</p> <p>This lengthy section uses CALSIM results to draw conclusions about the ability of the In-Delta Storage project to meet WQMP requirements for organic carbon. DSM2 is a more appropriate tool for making assessments about water quality. Therefore, one should rely on conclusions drawn in the Water Quality Report, rather than the Operations Report, to assess water quality impacts.</p> <p>Results are presented for a wet year (1986), a below normal year (1979), and two dry years (1985 and 1987). Selecting representative years is convenient for illustration. However, conclusions cannot be drawn from an analysis of representative years alone.</p> <p>On page 49, the following conclusion is drawn: “The results indicate that In-Delta Storage operations, both with and without circulation, stay within the required DOC standards at the export locations from January through June of typical wet and below normal years.” As shown in Figures 5.26 and 5.30, no releases (above circulation volumes) are made from Webb during these months and year types; releases above circulation volumes are made from Bacon in June only. In spite of these minimal releases, the conclusion on page 49 is not validated by Figures 5.34 and 5.35. According to these figures, the DOC objective is violated at Banks in June of wet and below normal years.</p>
5	CUWA	<p>Operations Report:</p> <p>Section 5.5 Conclusions and Recommendations (page 58) – Bullet 2 states, “Resolution of water quality issues is possible with circulation of water through the island reservoirs.” This conclusion is not supported by the modeling results.</p>
6	CCWD	IDS operations as modeled for the Study show significant deviations from the requirements of both

	(this comment also included in Economics)	<p>[CCWD & CUWA] PDAs, including significant exceedences of the limits on salt and organic carbon concentrations at urban drinking water intakes. Thus the modeled operations results are not representative of the agreed-upon actual project operations and performance, and conclusions about yield and benefits are not supported by the Study. Before the study is finalized, proposed project operations must be revised and re-modeled such that compliance with the PDAs is demonstrated. Conclusions about project yield and benefits must be based upon the results of modeled operations that meet the terms and conditions of both PDAs.</p> <p>CCWD participated in drafting CUWA's March 2004 comment letter on the current Study, and concurs with CUWA's detailed technical comments on issues concerning compliance with the PDA's.</p>
7	EBMUD	<p><u>Fishery Issues</u></p> <p>The EBMUD PDA also addresses fishery concerns. Each spring, out-migrating juvenile salmon and steelhead trout from the Mokelumne River pass by the north side of Webb Tract. To minimize entrapment or entrainment of these small fish, the EBMUD PDA contains Fisheries Terms and Conditions (Attachment A) that restrict pumping at the northeastern siphon station of Webb Tract from January 1 to June 30. Although these restrictions are significant, the Draft Report on Operations does not mention them. Section 4.4.2 of the Draft Report on Operations states "Diversions are assumed to occur on the south side of each island and discharge on the north." As this is a requirement of the EBMUD PDA from January 1 to June 30, the PDA should be referenced and the requirement appropriately noted in Section 4.4.2.</p>
8	EBMUD (this comment also included in Miscellaneous)	The EBMUD PDA should be referenced in Sections 1.1, 1.3, and 2.4 of the Draft Report on Operations, as well as in Section 3.2.3 of the Draft Summary Report.
9	PG&E	Additionally, from a planning standpoint, if you assumed that the gas pipelines would not be relocated, then the impact of making unplanned water releases to accommodate work on the gas transmission lines should be included in the CALSIM model runs and added to the impute to the economic models listed in section 3.6 (including revisions to the list) on page 16 of the <u>Draft Report on Operations</u> (Dec. 2003).
10	CDWA	The review has a mix of the Delta Wetlands Project operations as permitted by the SWRCB and

	SDWA (this comment also included in Economics)	subject to the various water right protest settlement agreements and modifications introduced by the study team. It is not clear whether the alleged benefits result from the project approved by the SWRCB or some other project. The burdens should also be clearly characterized. By way of example, the pumping costs and water quality degradation associated with the recirculation of water to avoid peak dissolved organic carbon concentrations as well as the possible benefits are not part of the Delta Wetlands Project and need to be addressed as an alternative.
11	DW	<p>Draft Summary Report (DSR P. 17) states that “The present study assumed 2020 level of development ...”</p> <p>The operational modeling criteria assume a 2020 level of development (LOD) in this Report. CALFED is using a 2030 LOD for planning purposes which will include increased population levels and greater demands for water. Higher demands will increase the water supply benefits of the Project. The DSR should reflect that the higher demands associated with 2030 population levels will increase the water supply benefits of the Project. Presumably, all projects will be evaluated using the same LOD assumption.</p>
12	DW (this comment also included in Economics)	<p>Draft Summary Report (DSR P. 21) states that “The In-Delta Storage Project could provide additional water for recharge to help control groundwater overdraft south of the Delta ...”</p> <p>The Project can provide new water to help alleviate the groundwater overdraft problems south of the Delta and in the San Joaquin Valley. The full benefits of overdraft protection have not been considered in the economic analysis of the Project.</p>
13	DW	<p>Draft Summary Report (DSR P. 27) states that “The weighted project yield (Table 3.2) with the FMWT impact is 20 taf less ...”</p> <p>The weighted project yield impact of 20 taf when the FMWT < 239 rules are applied is too high and should be verified. The reduction is both inconsistent with past modeling and illogical, considering the constraints associated with the FMWT are primarily a reduction in diversions during February and March. This impact may be overstated.</p>
14	DW	Draft Summary Report (P. 28) states that “Results given in Table 3.2 indicate that impact of D1643 requirements on In-Delta storage water balance is in the order of about 100 taf.”

		<p>The cost in water supply benefits associated with D1643 requirements should be put into context relative to other water projects under consideration by CALFED. Because of the advanced stage of the DW Project, operating criteria have been established that ensure the project will not have environmental impacts or adversely affect others. Other water supply projects will face similar rules in order to avoid or mitigate environmental impacts. DWR should explain that the water cost of environmental mitigation must apply to all water supply projects.</p>
15	DW	<p>Draft Summary Report (P. 35-36) states that ‘Further studies emphasizing water quality improvements should be conducted to determine the extent to which In-Delta Storage can improve Delta water quality.’</p> <p>The Report acknowledges the potential of the Project to create salinity benefits in the Delta but does not include a salinity improvement study among the 10 evaluation scenarios. The release of low salinity water from an In-Delta Storage Project can help reduce salinity levels during the dry summer and fall months. In-Delta Storage can also be used to repel seawater in emergencies. To ensure a balanced solution that includes water quality improvement, this additional study should be quantified and considered in all future analyses.</p>

WATER QUALITY		
1	CUWA (this comment also included in Operations)	Chapter 2 of the Water Quality Report shows that the In-Delta Storage circulation alternative significantly violates the CUWA Water Quality Management Plan (WQMP) limitations placed on changes to organic carbon concentrations at urban intakes. A useful summary of these violations may be found in Table 2.5.10 on page 68. Note that under the circulation alternative Bacon Island releases water 55% of the time (Table 2.4.3). It is reasonable to assume that violations of the WQMP organic carbon standards at the export pumps caused by the project are a result of releases rather than diversions. Preliminary analyses confirm this point (M. Mierzwa, DWR, personal communication with R. Losee, MWD). From Table 2.5.10, 33% of the time the project will cause organic carbon violations at Banks; that is, 60% of the time water is released from Bacon Island, the project will be in violation. The In-Delta Storage operation was developed through CALSIM II modeling, as summarized in the Operations Report. Therefore, a feasible operations study has yet to be developed and the project yield numbers presented in the Operations Report are not supported. This review is focused on the DOC water quality modeling, with less emphasis on the operations modeling and dissolved oxygen modeling.
2	CUWA	The Water Quality Report shows that the In-Delta Storage circulation alternative consistently violates the urban intake salinity increase provisions of the WQMP and of Contra Costa Water District's Protest Dismissal Agreement (CCWD's PDA).
3	CUWA	The WQMP and CCWD's PDA contain a number of diversion and discharge limitations intended to protect water quality. Because of the limited time available for review of the Draft Feasibility Study, modeled compliance with all of these terms was not evaluated. The modeled violations of the organic carbon and salinity increase restrictions indicate that new modeling studies must be undertaken if conclusions about project operations are to be drawn. If such new studies are undertaken, diversions and releases, including diversions and releases for circulation, must show compliance with all relevant restrictions.
4	CUWA	Water Quality Report, Chapter 1: Section 1.2 (page 2). The importance of operating the In-Delta Storage project in compliance with the terms of CUWA's WQMP is, properly, acknowledged. However, subsequent discussion of compliance is focused on the terms of the Operational Screening Criteria, Attachment 2 to the

		<p>WQMP. The Drinking Water Quality Protection Principles, on Page 2 of the WQMP, also apply to project operations. In particular, the circulation operation now under consideration allows In-Delta Storage to reduce high concentrations of salt and carbon in project releases, but does so with more frequent circulation releases. Salt and carbon concentrations in the circulation releases that do not violate the numerical operational screening criteria may still violate the drinking water protection principles that require project operations to contribute toward continuous water quality improvement, to cause no water treatment cost increases, and to minimize and mitigate for any drinking water quality degradation.</p>
5	CUWA	<p>Water Quality Report, Chapter 1:</p> <p>Section 1.2.2 Long-Term Requirement (page 3) – An analysis of the net long-term increase in DOC and salt loading was not provided. Given the nature of the circulation alternative, we suspect that the 5% objective is significantly violated. This requirement can only decrease project yield and operational flexibility.</p>
6	CUWA	<p>Water Quality Report, Chapter 1:</p> <p>Section 1.2.3 Total Organic Carbon, bullet 1 (page 3) – While the modeled project operations minimize the number of days that the 14-day average TOC exceeds 4.0 mg/L, it does so in a manner that may be more detrimental to drinking water treatment plant operations and regulatory compliance, violating the intent of the criteria. Treatment plant compliance with the Stage 1 Disinfectants and Disinfection By-Products Rule is based on removing a certain percent of TOC based on influent TOC and alkalinity. The limit of 4 mg/l TOC was selected for the WQMP because TOC removal requirements increase 10% when influent TOC exceeds 4 mg/l, and increases another 5% when influent TOC exceeds 8 mg/l. If compliance samples are collected during one of the TOC peaks, plants may fail to achieve the required removal rate unless they are always operating at the higher coagulant doses required by the peaks (costly), or are able to adjust operations on a daily basis (logistically difficult).</p>
7	CUWA	<p>Water Quality Report, Chapter 2:</p> <p>Section 2.4.2.5 Stage / Storage (page 32) – Operating the islands at low stage as often as is modeled may create wind induced turbidity spikes similar to those experienced in Clifton Court Forebay. Re-suspension of organically rich peat soils into the water column by wind mixing was not modeled in this report, or in the chapter 3 field investigations. In addition, the mesocosm work revealed a</p>

		significant contribution to shallow turbidity from release of gas bubbles from the sediments following drawdown and the loss of hydrostatic pressure (page 107). Further, gas bubble disturbance of the sediments was also associated with an increase rate of organic carbon concentration increase in the water column (Figs. 3.11, 3.12, 3.13).
8	CUWA	<p>Water Quality Report, Chapter 2:</p> <p>Section 2.4.2.5 Stage/Storage. – Examination of daily average project island storage for the circulation alternative (Fig. 2.4.6) shows that for about 9 to 9 ½ years out of 16 modeled Bacon and Webb island volumes will be 35 TAF or less. 35 TAF translates to a mean water depth of 2 m on both islands. These years of low volume storage on the islands will result in thousands of acres ideally suited for growth of aquatic and wetland plants. Long periods of low volume storage, such as would have occurred from 1987-1991, are likely to result in establishment of wetland vegetation unless control measures are taken. It is not clear what control measures might be taken if any are available and the cost of these measures have not been taken into account in the O&M estimates.</p>
9	CUWA	<p>Water Quality Report, Chapter 2:</p> <p>Section 2.5.2 Chloride at Urban Intakes (pages 51-61) – The WQMP chloride concentration objectives are not met through the current operation. See Table 2.5.6 (page 57) for a summary of violation frequency.</p> <p>The tabulated violations are based upon 14-day average concentrations, which understate actual numbers of violations; the WQMP restriction on chloride concentration increases is based upon 14-day averages, but CCWD's PDA restriction on chloride concentration increases applies to daily values.</p>
10	CUWA	<p>Water Quality Report, Chapter 2:</p> <p>Section 2.5.3 DOC at Urban Intakes (pages 61-72)</p> <p>The text on page 62 states that increases in 14-day average DOC values are “fairly small.” Table 2.5.9 (page 67) shows average DOC increases ranging between 0.4-0.6 mg/l, depending on location. Given base DOC values between 3.3-3.7 mg/l, average percent DOC increases range between 12-16%.</p> <p>The WQMP organic carbon concentration objectives are not met through the current operations. In fact, the objectives are significantly violated. The frequency of violation is 9% at</p>

		Rock Slough, 23% at LVR intake, 33% at Banks, and 26% at Tracy. See Table 2.5.10 (page 68) for a summary of violation frequency and discussion in Overall Conclusions above.
11	CUWA	Water Quality Report, Chapter 2: Section 2.5.4 TTHM at Urban Intakes (pages 72-84) - The WQMP TTHM concentration objectives are not met through the current operation. See Table 2.5.14 (page 80) for a summary of violation frequency.
12	CUWA	Water Quality Report, Chapter 2: Section 2.5.5 Bromate at Urban Intakes (pages 84-95) - The WQMP bromate concentration objectives are not met through the current operation. In fact, the objectives are grossly violated. The frequency of violation is 19% at Rock Slough, 22% at LVR intake, 17% at Banks, and 20% at Tracy. See Table 2.5.18 (page 91) for a summary of violation frequency. A similar analysis as described in the Overall Conclusions for organic carbon and project operations should be undertaken for bromate.
13	CUWA	Water Quality Report, Chapter 2: Section 2.6 Conclusions – The text states that median values show “... a very slight increase in all four water quality parameters covered in this study.” The implication that modeled project operations have only slight impacts on Delta water quality is not justified. For example, as discussed above, average percent DOC increases are in the 12-15% range. Median percent DOC increases are similar. The plot below [shown on CUWA Letter] of mean monthly DOC at CCWD’s Los Vaqueros intake was generated from IDS base case and Study 4b500 results; it shows increases that cannot be characterized as “very slight”.
14	CUWA	Water Quality Report, Chapter 3: DWR staff have done a good job dealing with a difficult problem, estimating organic carbon loading for a project not yet constructed and without an analogous system available for study. The areal organic carbon loading rates used in the DSM2 model runs are within reason (Table 3.2 Use of OC Field Data in Modeling, page 132) given the uncertainty of scaling from mesocosm work to full scale operation. However, the mesocosm experiments do not provide information for long periods of low water level such as 1987 through 1991. As discussed above in the Stage and Storage section, long periods of shallow water will result extensive growths of aquatic and wetland plants. If the

		islands become densely covered with vegetation and then flooded, there could be a shift away from peat soil as the dominant source of organic carbon, as is the case in under the conditions simulated in the mesocosm work, to new plant carbon as the dominant source. If these sources of carbon are additive, then this situation would result in further violations of the WQMP and PDA. Since this likely scenario would result in a decrease in project yield and in operational flexibility, it should be identified in the feasibility summary report.
15	CUWA	<p>Water Quality Report, Chapter 4:</p> <p>General Comment –DSM2 is not an appropriate tool for addressing most of the dissolved oxygen and temperature issues related to the In-Delta Storage Project. Therefore, reliable conclusions cannot be drawn from most of the analysis presented. Specifically, DSM2 cannot address dissolved oxygen and temperature in the reservoir. DSM2 could be used to address dissolved oxygen and temperature in the adjacent channels (as was shown in Chapter 4), but a transport model is not necessary for such analysis. The only appropriate impacts that DSM2 should be used to measure are temperature and dissolved oxygen changes at Turner Cut.</p>
16	CUWA	<p>Water Quality Report, Chapter 4:</p> <p>4.3.2 Dissolved Oxygen (page 138). The second paragraph states that “because discharge of stored water is prohibited if the DO of stored water is less than 6.0 mg/L, it is assumed that DO of island water would be at 6 mg/l at all times. In reality, this may require some aeration or application of other DO improvement technology...” Section 3.2.4 (page 109) indicates that DO dropped rapidly in the mesocosm when its air line kinked. Wind mixing and circulation will have to compete with the high oxygen demand of the rich peat soils and decay of the prolific plant and algae growth. Aeration or other DO improvement technology is a significant operational cost that has not been considered.</p>
17	SCVWD	Although the analysis of the project appears to be well-thought out and comprehensive, it does not demonstrate that the proposed project would not harm our ability to supply high-quality drinking water to Santa Clara County.
18	SCVWD (this comment also included in Economics and	As stated in CUWA’s February 12, 2002 letter, to Bay-Delta Authority Executive Director Patrick Wright (copy attached), decision-makers and others will need an analysis which meets all of the proposed project’s water quality requirements and all of its water rights operating restrictions before drawing conclusions regarding project benefits. Based on the information presented in the draft

	Miscellaneous)	feasibility report, neither the water quality requirements, nor the water rights operating restrictions have been met. Therefore, we can not support any conclusions regarding project benefits at this time.
19	SCVWD	Although the analysis presented in the draft In-Delta Storage Program State Feasibility Study was comprehensive and well thought out, we do not feel that the water quality summary found in the executive summary, correctly represents the results of the analysis. The modeling to date, by DWR, does not demonstrate that provisions of the Water Quality Management Plan will be met. The project modeling indicates that the specific water quality criteria outlined in the WQMP are violated a significant percent of the time. For example, at the State Water Project intake at Banks Pumping Plant, the organic carbon standard is violated 33% of the time (table 2.5.10), the bromate standard is violated 17% of the time (table 2.5.18), and the TTHM and chloride standard is violated 3% of the time (table 2.5.14 and table 2.5.6). In addition, according to personal communications between Mike Mierzwa at DWR and Rich Losee at Metropolitan Water District (MWD), because project releases are not occurring all the time, the organic carbon standard is violated 60% of the time that water is released from Bacon Island.
20	SCVWD	On Page 2, of the Water Quality management Plan, five important Drinking Water Quality Protective Principles are listed. The project described in the draft In-Delta Storage Program State Feasibility Study does not demonstrate clear adherence to any of the Drinking Water Quality Protection Principles. In particular, the project described in the Feasibility Study could cause substantial increases in the cost of water treatment for the SCVWD, may contribute to non-compliance with the total organic carbon removal requirements of the Stage 1 Disinfectants and Disinfection By-Products Rule, and does not “contribute to CALFED’s progress toward achieving continuous improvement of Delta drinking water source quality.”
21	SWC	The feasibility study indicates that the In-Delta Storage project does not meet all the water quality requirements laid out in the Water Quality Management Plan (WQMP). We are very concerned that violations of the WQMP requirements will lead to increased drinking water treatment costs for our member agencies that provide municipal drinking water. SWC also supports the comments made by the California Urban Water Agencies, which include a more detailed evaluation of the In-Delta Storage operations and water quality studies.
22	DW	Draft Executive Summary (DES P. 11) states that “Additional water quality field and modeling evaluations are necessary to refine project operations for organic carbon, dissolved oxygen and

		<p>temperature.”</p> <p>The DES calls for additional water quality evaluations to determine project impacts on DOC, DO, and temperature. As noted in our cover letter, the current analyses are adequate to ensure water quality objectives can be met with no significant financial impacts on the Project.</p>
23	DW	<p>Draft Summary Report (DSR. 8) states that “Levees that fail can also threaten the [Delta] water quality ...”</p> <p>The threat to water quality in the Delta from levee failures and the resultant seawater intrusion is reduced by the Project in a number of ways. First, strengthening the levee embankments reduces the risk of levee failure. Second, having an in-Delta reservoir can assist in the management of a water quality problem after a levee failure on other Delta islands. If the reservoirs are empty, high salinity water can be pulled onto the islands and released later in the year. If the reservoirs are full, low salinity water can be released back into the Delta to improve in-Delta quality.</p>
24	DW	<p>Draft Summary Report (DSR P. 25) states that “When water is stored over peat soils, DOC growth occurs ...”</p> <p>The DOC growth rate included in the water quality modeling assumes a high value that is excessively conservative and inconsistent with observed data elsewhere in the Delta. The growth rates are based solely on the Davis tank studies and are an order of magnitude higher than past work. As indicated in DW correspondence of September 5, 2003, we believe the DOC growth rate assumptions generated by the mesocosm tank studies are unrealistic and inappropriate because they do not reflect anything close to a steady-state condition that could be expected on the reservoir islands. We believe the loading rates in the DSM2 model should be corrected to reflect more reasonable loading rate assumptions. At best, the current model runs provide a tool to help understand a worst-case operating scenario (e.g., initial reservoir start-up) as an upper bound to understand the financial risks associated with the DOC loading uncertainties. However, it is not appropriate to consider these high DOC loading assumptions as representative of long-term reservoir operations. Nor is it necessary to require additional studies of this issue since the Project has been shown it can operate even at the upper bounds of the DOC loading range. Also, a comparison of Project loading rate assumptions with the existing agricultural loading rates in the DSM2 DOC model will help demonstrate the excessively conservative approach in the current DOC</p>

		analysis.
25	DW	<p>Draft Summary Report (P. 51) states that “The OC growth rates shown in Table 4.1 were used in the DSM2 model runs.”</p> <p>The 0.59 gC/m²/day growth rate for August, September, and October is significantly higher than the loading rates of 0.22 and 0.42 gC/m²/day from the mesocosm tank studies, as shown on Figure 4.6. Even though we believe these loading rates are unrealistic as discussed above, the assumed loading rates in the DSM2 model should be corrected to reflect the referenced study.</p>
26	DW	<p>Draft Summary Report (P.51) states that “... annual average areal loading rate of about 100 gC/m²/yr.”</p> <p>The annual average loading rate of organic carbon (100 gC/m²/yr) assumed in the DSM2 model is nearly an order of magnitude above other sources in the Delta, including agricultural drainage from the intensively farmed deep peat islands of the Delta. (See DW correspondence of September 5, 2003.) This assumed loading generates DOC concentrations in the model that are excessively conservative, bordering on illogical. DOC concentrations predicted for the reservoir islands reach levels that exceed concentrations found anywhere in the world (e.g., 350 mg/l). The extreme DOC loading assumptions do show the ability of the project to accommodate high DOC loading rates. Even at the unrealistic upper bound, the impact on project operations is small. This low sensitivity to DOC loading suggests that additional studies and field investigations are not necessary.</p>
27	DW	<p>Draft Summary Report (P. 55) states that “EC and DOC were simulated as a conservative constituent while in the Delta channels.”</p> <p>DOC was simulated in the DSM2 model as a conservative constituent while on the reservoirs and in the Delta channels. This is another example of the conservative nature of the DOC analysis since evidence exists to the contrary. During the January 15, 2003 CBDA Science “Brownbag,” Dr. James Hollibaugh presented data that suggests there is DOC degradation in the Delta channels and throughout the water supply system.</p>
28	DW	<p>Draft Summary Report (P. 73) states that “Considering the simulation period of 16 years, this [temperature violations] can be attributed to inherent noise within the model.”</p>

		<p>The temperature violation identified in Table 4.17 are clearly the result of model noise since little or no reservoir discharges are occurring during the time periods of violations. For example, there were no releases from Bacon during the 2 degree violation on June 14, 1976. Therefore, the Project could not have caused the reported violation.</p>
29	DW	<p>The Science Panel has reviewed the water quality analysis and has expressed no opinion regarding appropriate DOC loading rates citing a lack of understanding of underlying DOC generating mechanisms. They have recommended additional study to fill this void.</p> <p>But, science in this area is not well developed and further studies to clarify DOC loading will continue to be problematic. Even after expending significant money and time for further studies, it is very likely that the results will continue to be imprecise. Given the low sensitivity of the Project to DOC loading rates, additional studies and field investigations are not necessary. A more practicable approach may be to investigate mitigation measures to address a range of DOC loading rates and to establish the financial bounds for possible DOC risk management measures. Reservoir circulation is an excellent example of one such DOC mitigation measure.</p>
30	DW	<p>Finally, the Report ignores the potential of the Project to provide salinity benefits. The current operating scenarios focus on water supply and environmental benefits. Decision 1643 and the WQMP criteria ensure that water quality in the Delta is not negatively impacted. However, opportunities for the Project to improve or protect water quality in the Delta are abundant. An additional study should be conducted to evaluate the Project's capability to generate salinity benefits.</p>

ECONOMICS

1	CCWD (this comment also included in Operations)	IDS operations as modeled for the Study show significant deviations from the requirements of both [CCWD & CUWA] PDAs, including significant exceedences of the limits on salt and organic carbon concentrations at urban drinking water intakes. Thus the modeled operations are results are not representative of the agreed-upon actual project operations and performance, and conclusions about yield and benefits are not supported by the by the Study. Before the study is finalized, proposed project operations must be revised and re-modeled such that compliance with the PDAs is demonstrated. Conclusions about project yield and benefits must be based upon the results of modeled operations that meet the terms and conditions of both PDAs.
2	SCVWD (this comment also included in Water Quality and Miscellaneous)	As stated in CUWA's February 12, 2002 letter, to Bay-Delta Authority Executive Director Patrick Wright (copy attached), decision-makers and others will need an analysis which meets all of the proposed project's water quality requirements and all of its water rights operating restrictions before drawing conclusions regarding project benefits. Based on the information presented in the draft feasibility report, neither the water quality requirements, nor the water rights operating restrictions have been met. Therefore, we can not support any conclusions regarding project benefits at this time.
3	SCVWD	Because our analysis of the draft report on water quality indicates that the WQMP is significantly violated, we did not conduct a thorough analysis of the economics of the project. We would hope that, if and when, the WQMP criteria are met, the project cost benefit analysis includes any expected increased cost of water treatment to the SCVWD in the cost estimate.
4	SWC	SWC has been an active participant in the CALFED Bay-Delta Program, and we have an interest in the evaluation of feasibility study, costs and benefits for CALFED storage project alternatives. SWC has reviewed the Feasibility Study, and we have two concerns about the In-Delta Storage Program, regarding its cost-effectiveness, and its impacts on water quality. We believe that the Feasibility Study raises serious questions as to the project's cost effectiveness, and that its costs may have been underestimated due to exclusion of the additional water quality impact mitigation costs that would be incurred if the project went forward.
5	EBMUD (this comment	The infrastructure and operation and maintenance costs required by the PDA's Seepage Control Plan (monitoring wells and automated monitoring systems) should be included in the cost analyses

	also included in Engineering)	presented in the Draft Summary Report (Table 5.4) and the Draft Report on Economic Analyses (Table 3). It is our understanding that these costs have not yet been incorporated.
6	NCWA	<p>The Northern California Water Association (NCWA) has concerns with the level of detail and methodology used for the economic benefit and cost analysis for the Draft In-Delta Storage Program State Feasibility Study, and the broader implications it could have on other Integrated Storage Investigation (ISI) project studies.</p> <p>More specifically, some effort has to be made to quantify the benefits storage provides towards the CALFED objectives. It will be difficult to justify the development of any storage project through the use of a benefit/cost analysis, if the project's contribution to CALFED objectives is not quantified. Importantly, this would be the case for any CALFED activity and is not just limited to the ISI. Increased storage capacity, in Northern California for example, will provide considerable and measurable benefits to water quality, both aquatic and terrestrial ecosystem quality, and water supply reliability. If CALFED expects projects to provide these benefits, they must be quantified. Most importantly, the value of operational flexibility for all of the various needs will be significant, particularly during prolonged dry years. Value must be assigned to these benefits if a true assessment of the projects is to occur.</p> <p>Not quantifying all of the project benefits leads to the confusing benefit/cost summary provided in the Conclusions section of the draft Executive Summary for the project study, where the reader gets the impression that the benefits associated with the project totaled approximately a third of the projects annual cost. All of the project benefits need to be quantified, a more accurate range of total potential benefits should be used, or a better and more thorough explanation of the potential benefits that have not been quantified needs to be presented prior to the listing of the quantified benefits and costs.</p> <p>The methodology and analysis used in the Feasibility Study for the In-Delta Storage Program is critical not only to the project being studied, but also has implications on other ISI Projects. It is critical that CALFED use accurate and defensible criteria for determining the benefits and costs associated with these projects.</p>

7	BAWSCA	<p>The economic analysis is based on a faulty assumption or understanding of Bay Area water systems and their operating limitations. The economic analysis assumes that:</p> <p>Regionally, the San Francisco Bay Region is expected to be at a relatively high level of reliability in 2020 after the assumed adoption of economically justified local water conservation and supply augmentation measures in the context of the assumed availability of local carryover storage. Consequently, State Water Project deliveries available under contract and interruptible deliveries that were not of net economic value to the region (hereafter referred to as unallocated deliveries) were assumed to be available to augment SWP South Coast Region urban deliveries. (Draft Report on Economic Analysis p.8, and Draft Summary Report, Section 7.4.2.1, page 106)</p> <p>This assumption could underestimate the project’s value and erroneously suggest where benefits from this or other projects should accrue.</p> <p>Combined, BAWSCA’s 28 cities, water districts and water companies rely on the San Francisco regional water system for only two-thirds of their current water supply needs. While BAWSCA agencies are committed to local water conservation and supply augmentation measures, and while such measures are an important part of our long range water supply planning, our analyses show that they are not sufficient in themselves to result in a “high level or reliability in 2020...”. We recommend that the report’s assumption be re-evaluated and the model and the conclusions be revised appropriately.</p>
8	CDWA SDWA (this comment also included in Operations)	<p>The review has a mix of the Delta Wetlands Project operations as permitted by the SWRCB and subject to the various water right protest settlement agreements and modifications introduced by the study team. It is not clear whether the alleged benefits result from the project approved by the SWRCB or some other project. The burdens should also be clearly characterized. By way of example, the pumping costs and water quality degradation associated with the recirculation of water to avoid peak dissolved organic carbon concentrations as well as the possible benefits are not part of the Delta Wetlands Project and need to be addressed as an alternative.</p>
9	CDWA SDWA (this comment also included in	<p>The claim that protecting 9,000 acres of agriculture and wetlands on the habitat islands goes beyond mitigation for the loss of 5,490 acres on Webb Tract and 5,625 acres on Bacon Island ignores the fact that Holland Tract and Bouldin Island are already used for agriculture and habitat. In reality, the pre-project condition is roughly 20,000 acres of agriculture and habitat and the project condition</p>

	Agricultural)	is 9,000 acres of agriculture and habitat and 11,000 acres of reservoir. Additionally, it would appear that you are claiming benefits on the same land for both agriculture and wetland habitat enhancement. This would appear to be double counting. Winter flooding of field corn and asparagus fields is a customary agricultural practice and when used for duck hunting, the flooding period is somewhat extended. The benefits of such customary practices should not be claimed as mitigation for the project. More intensive management for wetland and other habitat purposes will likely have a corresponding reduction in agricultural benefit and the reverse is equally likely.
10	State of California, Department of Transportation (this comment also included in Engineering)	Revision of the original DW project seems to have alleviated the Department's major concerns with the structural integrity of the highway, and we look forward to working closely with the project proponents in the evaluation and implementation phases to insure the safety of the traveling public and the protection of the State's infrastructure investment. However, the Department is concerned that the existing agricultural land use of the adjacent land may be abandoned, leaving the land to revert to wetland status. This would seriously impact any future widening by greatly increasing the cost of right of way acquisition in order to mitigate for the loss of wetland habitat. Further feasibility and cost analysis should evaluate fully the increased costs of future SR 12 projects, and the availability of funds to cover those increased costs, and the risks associated with a no project alternative for those projects, if the land will no longer be in agricultural production, against the benefit of the proposed project.
11	DW	<p>DES (P. 6-7) states that "It should be noted that these estimates [of project benefits] are extremely sensitive to assumptions about the future cost and availability of regional water management options ..." and "Before total project benefits and costs can be compared, value must be assigned to these benefits."</p> <p>The DES cautions that the economic estimates are "extremely sensitive" to the future availability and cost of other water management options (e.g., conservation, recycling). In addition, many benefits of the Project have not yet been quantified. It should be emphasized in the DES that the assessment of project benefits is incomplete and that DWR intends further review of these assumptions before finalizing the economics analysis for all water storage projects.</p>
12	DW (this comment also included in Operations)	<p>Draft Summary Report (DSR P. 21) states that "The In-Delta Storage Project could provide additional water for recharge to help control groundwater overdraft south of the Delta ..."</p> <p>The Project can provide new water to help alleviate the groundwater overdraft problems south of the</p>

		Delta and in the San Joaquin Valley. The full benefits of overdraft protection have not been considered in the economic analysis of the Project.
13	DW	<p>Draft Summary Report (P. 101) states that “... DWR acknowledges that additional input from economic experts and potential project participants is needed to refine this [economic] assessment.”</p> <p>As noted in our cover letter, the economic analysis presented in the Report is incomplete and should not be relied upon as a basis for future decision making. Its assumptions are consistently conservative and serve only to establish a low end range of benefits.</p>
14	DW	<p>Draft Summary Report (P. 103) states that “... the total capital costs amortized over a 50-year period with an assumed discount rate of 6%.”</p> <p>As noted in our cover letter, the annualized project cost is overstated because the assumed interest rate is too high.</p>
15	DW	<p>Draft Summary Report (P. 106) states that “... the necessary capacity and policies needed to move available supplies among urban users to mitigate any localized shortage-related impacts caused by disparities in supply availability are assumed to be in place in 2020.”</p> <p>The assumption that the necessary capacity and policies to freely move water around the state as needed by 2020 is very questionable. This assumption will bias the economic optimization process by making phantom water available and significantly undervalue the water supply benefits of a new water storage project. For example, in the Bay Area, water quality issues make full system interconnection prohibitively expensive.</p>
16	DW	<p>Draft Summary Report (P. 106) states that “The availability and cost of the local regional options and availability of local carryover storage were assumed.”</p> <p>The availability assumptions for local supply options may significantly bias the economic analysis because the local regional supply options are assumed to be available at a constant level every year (P. 9, Draft Report on Economic Analysis). The LCPSIM model will not capture the large costs and losses that can arise when local shortages occur in these regional supplies. For the South Coast Region, local droughts and regional shortages often occur independent of state-wide hydrology. This modeling bias will significantly understate the water supply benefits of the Project as well as</p>

		any other new water supply.
17	DW	<p>Draft Summary Report (P. 111) states that “These [groundwater recharge] deliveries are valued at the average alternative cost of agricultural groundwater pumping in San Joaquin Valley, about \$55 per acre foot.”</p> <p>Placing a value on groundwater recharge equivalent to average pumping costs does not seem to appropriately value this benefit. This \$55 assumption overlooks the long-term effect on already overdrafted groundwater basins. The short-term use of groundwater as an alternative water supply (as analyzed for this study) may have no significant effect on the groundwater supplies; however, over the 50-year life of the Project, this effect could be significant. The only way to address the groundwater overdraft problem is to either provide new water to agricultural users or reduce the water demand (e.g., fallowing). In either case this benefit would be more than the \$55 per acre foot assumption. So the benefit not addressed in this analysis is the long-term reduction in groundwater overdraft.</p>
18	DW	<p>Draft Summary Report (P. 116) states that “If the assumptions are unreasonably optimistic about cost and/or availability of the regional options, the value of the In-Delta Storage Project will be understated.”</p> <p>The point selected on the In-Delta benefits curve (green line) from Figure 7-3 represents the minimum water supply value of the Project. An increase in the price of regional water management options that causes a reduction in local options by 100 taf (blue line) will increase the water supply benefits of the Project by about \$20 million per year. This high sensitivity to regional management options (e.g., conservation, recycling) is significant and must be considered in the final economic analysis.</p>
19	DW	<p>The economic analysis inappropriately relies on Bulletin 160-98 for its demand and conservation assumptions. Bulletin 160-98 has been significantly criticized and is now hopelessly out of date. For example, the urban demands are based on regional population forecasts produced in 1993. Further, demand projections are for 2020 instead of 2030 as specified in CALFED’s Common Assumptions. Bulletin 160-98 uses assumptions for the level of conservation that will be in place in 2020 that do not reflect decisions currently being made by responsible water agencies. The analysis assumes the implementation of all urban BMP’s whether or not they are cost effective. This is not required by the Urban Best Management Practices MOU and is unlikely to occur. Cost assumptions</p>

		<p>for recycled water options are also more optimistic than more recent analyses. As such, Bulletin 160-98 provides an unrealistic set of planning assumptions that tend to understate urban water demand and Project benefits.</p> <p>These deficiencies are important because the economic model is extremely sensitive to its assumptions. The defining inputs to LCPSIM are the level of urban demands, and the cost and volumes of supplies that could be used instead of new Project water supplies. None of these key inputs are known with certainty. As Appendix A to the Draft Report on Economic Analyses shows, changes in assumptions concerning the costs of alternative supplies can make significant changes in the water supply benefits of the Project. Comparison of Tables A.2 and A.5, shows that the estimated value of the project to Southern California urban users changes from \$15 million to \$27 million per year if the cost of its alternatives are increased by 50 percent. Similar analyses have not been conducted into the sensitivity of the results to water supply volumes or demand levels, but it seems clear that the modeling must be based on the best available information for these key variables. These assumptions must be carefully evaluated before the economic analysis can be finalized; therefore, the speedy development of defensible Common Assumptions for these factors is of utmost importance.</p> <p>Finally, the economic analysis uses a cost of money that overstates what beneficiaries would actually pay. Using the model's assumed cost of money, the annual capital and operating cost of the project was estimated to be \$60 million. But a more realistic cost of Project financing would reduce the annual capital and operating cost to less than \$45 million. Beneficiaries would not be asked to pay the higher "societal" cost of money. This distinction is important for potential Project partners.</p>
20	<p>San Luis & Delta-Mendota Water Authority</p> <p>Westlands Water District</p>	<p>In contrast to the progress made on engineering and scientific issues, the Report's economic analysis is incomplete; therefore, additional analysis and peer review is required.</p> <p>The economic work that has been done raises questions:</p> <p>The study's assumptions are very conservative and in almost all cases tend to understate project value. The demand, supply and cost data used are from the outdated Bulletin 160. If updated Bulletin 160 information remains unavailable, it is essential to develop sensitivity analyses to investigate the effect of the more import assumptions used in this analysis.</p> <p>Soft and indirect benefits are not estimated so that, for example, the value of the project's contribution to the Environmental Water Account is estimated as the avoided cost of water</p>

		<p>purchases rather than the value of a healthy environment, a more robust fishery, or more reliable project operations.</p> <p>Some values, such as the value of lowering export salinity at key times, are not estimated at all. Finally, the economic analysis lists the following un-quantified benefits that we believe should be valued in any subsequent economic analysis:</p> <ul style="list-style-type: none"> Operational Flexibility Water quality improvements Wildlife habitat improvements Storage for water transfers Contribution to existing Delta requirements (D1641) System-wide carryover storage
--	--	--

ENGINEERING		
1	EBMUD	<p>Integrating the Requirements of EBMUD’s PDA</p> <p>EBMUD’s concerns over the intentional flooding of the project islands are that it could increase risks to the Mokelumne Aqueducts in two ways: 1) seepage beneath the levees causing flooding of adjacent islands; and 2) an outward breach of the project island’s levees which could then cause the failure of an adjacent island’s levee. The Feasibility Study’s Draft Engineering Investigations Summary states:</p> <p>The seepage analyses conducted for three cross sections taken along the Webb Tract and Bacon Island levees shows that the proposed reservoir islands may increase the water table beneath the levee at adjacent islands 2 to 3.5 feet, and that flooding may occur in the neighboring islands in the absence of a seepage control system. (Pg. 48)</p> <p>The Draft Engineering Investigations Summary goes on to note:</p> <p>The interceptor well concept generally appears to be able to mitigate seepage problems induced by the proposed reservoirs. Proper design, construction, and maintenance will be key to the success of the interceptor well system. (Pg. 48)</p> <p>Those observations are theoretical, based on computer modeling. The only way to know whether the interceptor wells actually perform as expected is to actually monitor groundwater levels under the project islands <i>and the adjacent islands</i>. To underscore the importance of monitoring to detect actual seepage, the last quoted sentence (from Section 5.3.8 of the Draft Engineering Investigations Summary) should be revised to say: “Proper design, construction, <u>monitoring</u>, and maintenance will be key to the success of the interceptor well system.”</p> <p>To ensure the seepage controls work, the EBMUD PDA contains a Seepage Control Plan (Attachment C) with very specific and detailed monitoring requirements. It also contains Geotechnical Terms and Conditions (Attachment B) with requirements for a Design and Review Board (DRB), a Monitoring and Action Board (MAB), and other safeguards. The DRB and MAB</p>

		<p>requirements of the PDA will also minimize the risk of an outward breach, as described in Section 3.3 of the Draft Risk Analysis.</p> <p>Accordingly, Section 5.3.8 of the Engineering Investigations Summary should include references to the Geotechnical Terms and Conditions (Attachment B) and Seepage Control Plan (Attachment C) of the EBMUD PDA, which will help to ensure that the seepage control measures achieve their purpose.</p>
2	PG&E	<p>PG&E's interest in these proceedings has been to disengage its important natural gas transmission lines that cross Bacon Island from what we believe would be unacceptable operational risks of having them submerged under a major water storage reservoir. PG&E is not opposed to the concept of building a substantial water storage reservoir on the site of Bacon Island, but believes that it is in the best interests of both the operation of the storage reservoir and the security and maintenance of the gas pipelines that they be relocated from Bacon Island by the storage project to an alternate right of way.</p> <p>As you are aware, the State Water Resources Control Board decision (D-1643) on the Delta Wetlands water rights applications contains several requirements related to PG&E's gas transmission lines on Bacon Island that must be satisfied prior to either the construction or operation of their proposed water storage project. These issues are acknowledged in Section 8.4.3, on page 128 of the <u>Draft Summary Report</u> (Jan. 2004). In the intervening years, PG&E and Delta Wetlands have engaged in an ongoing settlement discussion on these issues.</p> <p>One aspect of these discussions has been our position that any agreement would apply only to the construction and operation of the storage project as described by Delta Wetlands in their water right applications and environmental documents. For example, Delta Wetlands proposed operational schedule would have a yearly dry season, when we could access the pipelines for repairs. Delta Wetlands proposed building a road parallel to the pipeline right of way to facilitate these activities.</p> <p>It is apparent from our review of the current proposed water storage project described in the Feasibility Study, that there would be many significant changes in both the construction and operation of the water storage project. These would include substantial redesign and enlargement of the parameter containment structure and an operating plan that may not have any yearly dry period.</p>

		<p>On page 18 of the <u>Information Package</u> of the CalFed Science Public Workshop, it is stated that in evaluating the environmental consequences of the storage project there was no simulation of a drying of the reservoir beds. Moreover, the operating scheme would likely include the direction that, “With management of diversion and release operation, reservoirs would not reach extreme low or dry bed stage.” Additionally, the benefit of carry over storage is discussed in section 5.3.3 of the <u>Draft Report on Operations</u> (Dec. 2003).</p> <p>As you may be aware from the record of the Delta Wetlands Water Board proceeding, the gas lines on Bacon Island are the only interconnection between the McDonald Island Gas Storage Facility and the backbone of the gas transmission system that serves PG&E’s core and non-core customers. We have the capability to withdraw from storage on McDonald Island a third of the gas needed by our customers on a cold winter day. Any compromise of the interconnection could have extremely serious consequences for extended disruption of service to a large customer base, including curtailing gas-fired electric generation and gas price spikes in the available spot market.</p> <p>All this leads us to the undisputable conclusion that both PG&E and the State Water Project, or other operator of a water storage reservoir on Bacon Island would be better off if the project includes the relocation of Line 57 B off of Bacon Island. While high-pressure natural gas transmission lines routinely cross small waterways we are not aware of any that are permanently located beneath a major reservoir. When a new reservoir is proposed, gas transmission lines are routinely relocated out of harm’s way. Apart from PG&E’s added cost and delay in repairing the pipeline, a significant reason for the reservoir operator is the elimination of unnecessary burden of having to release stored water at an inopportune time, so as to facilitate access to the pipeline. An example of this separation occurred not far from the Delta with the relocation by the project proponent of two PG&E gas transmission lines that would have been inundated under part of the Los Vaqueros Reservoir.</p>
3	Placer County Water Agency (PCWA) & Recreational Boaters of California	<p>2) Fish Screens:</p> <p>I appreciate that at the briefing staff mentioned that it will be a challenge to develop appropriately designed and operational fish screens for this Project (relevant to the in-flow and out-flow of water within the Webb Tract and Bacon Island storage reservoirs). An opportunity available to this Project, as it moves forward, is that it can help lead or even facilitate discussions on what is the latest “state-of-the-art” fish screen.</p>

	(RBOC)	I recommend that consideration be given in the next or pre-design stage for the Project's fish screens that staff host a meeting(s) that includes colleagues from local water agencies and the agricultural community so that all can mutually learn and share information on this important matter.
4	Placer County Water Agency (PCWA) & Recreational Boaters of California (RBOC)	<p>4) Reservoir Embankment Design: "Bench" Option:</p> <p>The briefing and documents provided at the briefing identify two options to be utilized to enhance certain levee embankments. One is called the "Rock Berm Option" and the other the "Bench Option".</p> <p>The "Bench Option" needs further consideration to address, for example, how to help boats avoid going "aground" upon the "bench" on the slough side of the levees where ever this option is constructed for this Project.</p> <p>I recommend staff coordinate on this matter with the Department of Boating and Waterways and the US Corps of Engineers (who have considerable experience along the Sacramento River with levee construction). Members within the organization Recreational Boaters of California (RBOC) can also assist on this matter from the perspective of the recreational boater.</p>
5	CDWA SDWA	The interior slope stabilization with soil cement should be considered in light of future levee settlement and the hydraulic pressure created by seepage from the river when the reservoir is drained or at a level lower than the adjoining waterway. The explanation that the seepage control program could be used to avoid the back pressure does not address the problem in the areas where interceptor wells are not proposed. Even where interceptor wells are to be installed, back pressure control would likely require operation of the wells at different times. Settlement of the levee embankments can be expected to continue for an extended period even after the initial five (5) year construction period. This settlement could result in a failure of the soil cement facing. The soil conditions and fluctuations in water levels at Clifton Court Forebay are substantially different than those for the proposed projects and should not be used as a basis for justification without careful analysis.
6	State of California, Department of Transportation	The Department of Transportation's (the Department) concerns rest with that portion of the project adjacent to State Route (SR) 12 on Bouldin Island which may be impacted by any changes to existing conditions. In particular, modifications that would impact the safety of the traveling public, the integrity of SR 12 structures and roadbed, and the ability to widen the corridor to meet future needs, would be significant and require mitigation.

7	State of California, Department of Transportation (this comment also included in Economics)	Revision of the original DW project seems to have alleviated the Department's major concerns with the structural integrity of the highway, and we look forward to working closely with the project proponents in the evaluation and implementation phases to insure the safety of the traveling public and the protection of the State's infrastructure investment. However, the Department is concerned that the existing agricultural land use of the adjacent land may be abandoned, leaving the land to revert to wetland status. This would seriously impact any future widening by greatly increasing the cost of right of way acquisition in order to mitigate for the loss of wetland habitat. Further feasibility and cost analysis should evaluate fully the increased costs of future SR 12 projects, and the availability of funds to cover those increased costs, and the risks associated with a no project alternative for those projects, if the land will no longer be in agricultural production, against the benefit of the proposed project.
8	DW	<p>Draft Executive Summary (DES P. 4) states that "Diversion to the reservoir islands would occur during high flow season, lowering flood levels in adjoining channels and reducing the risk of flooding to neighboring islands."</p> <p>Although there are theoretical flood control benefits of reservoir island diversions, they may not be very significant. The diversion impacts to flood stage have not been analyzed in the DES, but any benefits will be short-lived because there is limited storage capacity on the reservoir islands. Far more significant are the flood control benefits associated with levee improvements. Strengthening an island in the Delta will directly protect habitat and infrastructure but will also have far reaching benefits throughout the Delta. Failed levees lead to open bodies of water (e.g., Frank's Tract, Mildred Island) that pose an enormous flood risk to neighboring islands and increase Delta salinity from seawater intrusion and mixing.</p>
9	DW	<p>Draft Summary Report (DSR P. 11) states that "... water diversion for Bacon Island has been changed from Old River to Santa Fe Cut."</p> <p>The Bacon Island discharge location on the south end of the island has been relocated by DWR from Middle River to Santa Fe Cut. This new location will place the Bacon Island discharges much closer to CCWD intakes in Rock Slough and on Old River and significantly increase the amount of Bacon Island water that reaches CCWD intakes. DWR should explain why the discharge was relocated and consider moving the facility back to Middle River.</p>
10	DW	Draft Summary Report (P. 89) states that "The schedule reflects total construction duration of 6

		<p>years ...”</p> <p>The Project can be constructed in less than six years. The reservoir islands contain large quantities of material that can be moved efficiently and inexpensively to the toe of the existing levee. The DW plan has been to use the material to create wide toe berms, buttress the existing levee and improve the landside factor of safety. The large toe berms provide a higher factor of safety than a uniform slope and allow a faster construction sequence by placing mass where it can improve the safety factor without waiting for full consolidation of the peat. The DW plan has been to place the fill in stages with time between stages to allow for strength gain and monitoring. The timeframe to place the fill for this method of construction should be considerably less than the six years assumed in the Report. A timeframe of 2 years to construct the embankments should be readily achievable with the DW planned method of construction.</p>
11	DW	<p>Draft Summary Report (P.99) states that “these gas wells and the parcels on which they are situated may not be part of the land acquisition for the project.”</p> <p>There is an operating gas well on Webb Tract that will be part of the land acquisition for the Project.</p>
12	EBMUD (this comment also included in Economics)	<p>The infrastructure and operation and maintenance costs required by the PDA’s Seepage Control Plan (monitoring wells and automated monitoring systems) should be included in the cost analyses presented in the Draft Summary Report (Table 5.4) and the Draft Report on Economic Analyses (Table 3). It is our understanding that these costs have not yet been incorporated.</p>

NAVIGATION		
1	Port of Stockton	<p>Our Federally authorized John F. Baldwin to Stockton Ship Channel traverses the waterway around Webb Tract. We believe your project may have impacts to our federally authorized shipping lanes. We need to know what those potential impacts are with the appropriate mitigations.</p> <p>The Port of Stockton also owns property on Bradford Island, west of Webb Tract and believes from past history that the flooding of Webb Tract creates seepage into Bradford Island. The Port also needs to know what the potential impacts are with appropriate mitigations because if seepage caused a levee failure to Bradford's levees it could also affect the Stockton Ship Channel, which traverses around Bradford Island.</p> <p>We have scanned the volumes of reports and can find only tow references to navigation. The draft Summary Report on Table 8.1, page 130 mentions Section 10 of the Rivers and Harbors Act of 1899 and Appendix B of the draft Report on Operations, page 67 mentions navigable waters for the American River. We cannot find any discussion or mention of the Port of Stockton and the ship channel, which extends from the Golden Gate to the city of Stockton in any of your reports. It is clear to us those possible impacts to commerce navigation or the ship channel was not a consideration in your study.</p>

AGRICULTURAL

1	Placer County Water Agency (PCWA) & Recreational Boaters of California (RBOC)	<p>3) Invasive & Non-Native Aquatic Weeds:</p> <p>In as much as the In-Delta Storage Project’s proposed storage of water within Webb Tract and Bacon Island will each be very shallow reservoirs, it should be anticipated that there will be a great accumulation of and serious problem in controlling the growth of invasive & non-native aquatic plants or weeds. Such plants are a very serious problem in the Delta water ways now. (Such plants are also a serious problem in irrigation canals and tributaries within and up-steam to the Delta system.) The briefing didn’t provide any information on how this serious operational problem will be addressed.</p> <p>Accordingly, I recommend that this matter be more fully identified with suggested resolutions set forth during the next stage of this Project with appropriate studies reported upon at subsequent meetings as well.</p> <p>I also recommend that staff consult with the staff of Department of Boating and Waterways - Ray Tsuneyoshi, Director - to learn more about that which DBW is confronted with “in” the 1,000 miles of Delta waterways on this matter. Likely wise, there are members within the Association of California Water Agencies - Steve Hall, Executive Director - who could also be consulted on the matter of canal and ditch system problems with aquatic plants.</p> <p>The seriousness of addressing and resolving invasive & non-native aquatic weeds has reached a very critical level in the Delta. My observations both as a water manager and while boating in the Delta is that the Webb and Bacon reservoirs – because of their resultant shallowness and warm waters that will held within each – will likely be “plagued” by such species unless a very carefully identified and aggressively implemented eradication program is carried out at such time as the Webb and Bacon reservoirs become operational.</p>
2	CDWA SDWA (this comment also included in Economics)	<p>The claim that protecting 9,000 acres of agriculture and wetlands on the habitat islands goes beyond mitigation for the loss of 5,490 acres on Webb Tract and 5,625 acres on Bacon Island ignores the fact that Holland Tract and Bouldin Island are already used for agriculture and habitat. In reality, the pre-project condition is roughly 20,000 acres of agriculture and habitat and the project condition is 9,000 acres of agriculture and habitat and 11,000 acres of reservoir. Additionally, it would appear that you are claiming benefits on the same land for both agriculture and wetland habitat enhancement. This would appear to be double counting. Winter flooding of field corn and asparagus fields is a customary agricultural practice and when used for duck hunting, the flooding</p>

		<p>period is somewhat extended. The benefits of such customary practices should not be claimed as mitigation for the project. More intensive management for wetland and other habitat purposes will likely have a corresponding reduction in agricultural benefit and the reverse is equally likely.</p>
3	DW	<p>Draft Summary Report (DSR P. 9) states that “Subsequent CEQA/NEPA documents <u>would</u> be required because ...” and “Future CEQA/NEPA evaluations <u>will</u> tier from ...”</p> <p>Several options for future environmental documentation are described in Chapter 8 of the DSR. The options include a “subsequent” CEQA/NEPA document and a “tiered” document, but they are just options at this time. Concluding that these types of documents will be required is inconsistent with the statements in Chapter 8 which describes several options but makes no conclusions. The text on page 9 should be revised from “would” and “will” to “may.”</p>
4	California Farm Bureau Federation	<p>The Farm Bureau was pleased that DWR came to the CALFED Working Landscapes Subcommittee Meeting and was encouraged by the explanation of preliminary CEQA analysis of agricultural resources including the use of Land Evaluation Site Assessment model and ongoing discussions of mitigation options with local governments and Department of Conservation. The Farm Bureau does not believe that easements are the only mitigation option that may effectively mitigate the impacts of the project to agricultural resources, but that easements should be considered as a potentially feasible option. Agriculture is a valuable resource in its own right. As such, it is not necessary to only consider potential easements that serve as a buffer against urban sprawl. DWR should be looking at agricultural resources that are of comparable quality and in the same region as those impacted by the project. The Farm Bureau understands that an analysis of agricultural resources has not been undertaken for two of the islands, pending a new management plan. The Farm Bureau looks forward to the inclusion of these islands in future CEQA analysis.</p>
5	State of California, Department of Conservation (DOC)	<p><u>Mitigation measures:</u> The Department encourages the use of agricultural conservation easements on land of at least equal quality and size as partial compensation for the direct loss of agricultural land. Further, when a Williamson Act contract is terminated, or if growth-inducing or cumulative agricultural impacts are involved, the ratio should be increased. The current document (Executive Summary and Environmental Evaluations section) indicates that the purchase of agricultural easements as mitigation is being considered, however, no details are provided in the scope of the document. Where would these easements be located? Which governmental entities are involved? Do the mitigation measures include protecting farmland in the project area or elsewhere in the County through the use of 20-year Farmland Security Zone contracts (Government Code section</p>

		<p>51296 et seq.) or the establishment of other Williamson Act contracts as per Government Code section 51200 et seq.? Although the document discloses that there would be substantial acreage converted from agriculture, it remains vague in identifying specific measures that would actually mitigate for the loss of agricultural resources. A proposed project's merits alone do not alleviate the need for mitigation. Additionally, the cost for mitigation should be included as part of the overall planning and implementation of a project.</p> <p>Although the direct conversion of agricultural land and other agricultural impacts are often deemed to be unavoidable by an agency's analysis, implementation of mitigation measures must be considered, and the adoption of a Statement of Overriding Considerations does not mean that an agency may avoid implementing feasible mitigation measures that lessens a project's impacts. The California Environmental Quality Act's (CEQA) Guidelines section 15370 describes what mitigations are intended to do; "avoid, minimize, rectify, reduce or eliminate or compensate" an impact.</p>
6	State of California, Department of Conservation (DOC)	<p>Williamson Act Lands: A project is deemed to be of statewide, regional or area-wide significance if it will result in cancellation of a Williamson Act contract for a parcel of 100 or more acres [CEQA Guidelines section 15206 (b) (3)], and requires circulation of a document through the State Clearinghouse for agency review and comment. If lands under Williamson Act contract exist on or adjacent to the project area, the Department recommends that a discussion of the contracts that would be terminated in order to accommodate the project be included in the documentation. The document mentions that the project sites are under contract, but does not provide a discussion. What are the potential impacts on nearby properties under contract resulting from termination of Williamson Act contracts? There may be significant cumulative impact on a region's or area's ability to maintain the agricultural uses in the event that two islands are used as reservoir islands and two other islands are converted to habitat. There may be significant cumulative impact on a region's or area's ability to maintain the agricultural uses in the event that two islands are used as reservoir islands and two other islands are converted to habitat.</p>
7	State of California, Department of Conservation (DOC)	<p>A Williamson Act contract is an enforceable restriction pursuant to Article XIII, Section 8 of the California Constitution and Government Code section 51252. There are several ways to terminate a Williamson Act contract. According to the California Supreme Court, non-renewal is the preferred method of terminating Williamson Act contracts. Cancellation is to be used only in extreme circumstances, where the landowner lacked foreknowledge of future land uses. As an</p>

		environmental impact report/statement was prepared for the Delta Wetlands Project in 1995, an extreme circumstance does not exist. Assuming that other requirements have been met, acquisition of contracted land by a public agency must also meet the requirements set forth in Government Code section 51295 in order to void the Williamson Act contract.
8	State of California, Department of Conservation (DOC)	The Bouldin and Holland Tracts are proposed for as habitat islands. Have the lead agencies given serious consideration of the use of a publicly-owned tract or island already (Sherman Island, most of Twitchell Island, for example) for habitat, so that Bouldin and Holland Tracts remain in agricultural production? Is there potential to keep a substantial portion of the lands in agriculture or manage the land as wildlife friendly farming operations? Are any alternatives to conversion to habitat being considered so that habitat and agricultural activities can coexist?

RECREATION

1	Placer County Water Agency (PCWA) & Recreational Boaters of California (RBOC)	<p>5) Recreation:</p> <p>I am familiar with the fact that most public water resource projects and reservoirs impounding the “waters of the state” must also provide recreational opportunities for the public as part of a water storage project.</p> <p>Neither the briefing nor the Draft Feasibility Study provides sufficient information as to what the intentions of the In-Delta Storage Project will be or will provide or will finance for recreation at Bouldin Island, Webb Tract, Holland Tract and Bacon Island or the Project as a whole.</p> <p>Page 4 of the Draft Feasibility Study does not clearly nor fully address this matter. Based upon what I read in the Study it seems that the matter of recreational benefits appears limited to the Bouldin Island and Holland Island component of the Project. The Webb Track and Bacon Island components of the Project seem to be entirely omitted on this matter all together.</p> <p>Although the Delta is the definitive waterway in central California, I find nothing noted any where in the Study (not even on page 4 under “Recreational Benefits”) nor was it mentioned by staff at the briefing about recreational boating or – and more importantly - how this Project will contribute toward it. Recreational boating needs to be identified and considered as an important component in all aspects of this Project.</p> <p>Illustration: Boat ramps and accessibility with near by sanitation facilities is required at other reservoirs (example: PCWA’s French Meadows Reservoir and Hell Hole Reservoirs) as well as State reservoirs (example: Oroville Reservoir) and Federal reservoirs (example: Folsom Reservoir).</p> <p>One example for this Project: State highway 12 traverses Bouldin Island and accordingly public access to this location of the Project currently exists. Bouldin Island can easily accommodate public accesses to the adjacent waterways, boat ramps, docks, parking lots for both boat trailers and vehicles, sanitation facilities and day and overnight use areas at various locations on Bouldin Island.</p> <p>Another example: Between the north-side of Bacon Island and the south-side of Mandeville Island is Connection Slough. There is a connecting bridge (known as Connection Slough Bridge) with one abutment affixed to Bacon Island and the other to Mandeville Island. The bridge is very low across the Slough presenting a problem for boats to travel beneath it and the hours of operation for this bridge to “open” for recreational boating purposes is limited. This Project includes the bridge (and the only vehicle access to Mandeville Island other than by ferry boat) and at this location the Project can help mitigate a recreational boating need by assisting in underwriting the cost for the bridge</p>
---	---	---

		<p>operator to tend the bridge on a schedule that better meets the needs of boaters.</p> <p>I recommend that the entire matter of recreation at each of the individual four islands/tracts as well as for the over all Project be far more fully explored, identified and mitigated for “Recreational Benefits” and recreational boating in particular be accommodated before the Project advances any further.</p> <p>I further recommend that staff include the Delta Protection Commission (DPC) and its Recreation Advisory Committee as well as representatives of the Recreational Boaters of California (RBOC) plus the California Delta Chamber of Commerce in all further discussions and meetings on any aspect of the recreational and boating component benefits for this Project.</p>
--	--	--

RISK ANALYSIS		
1	EBMUD	<p><u>Impact on EBMUD's Mokelumne Aqueducts</u></p> <p>EBMUD's Mokelumne Aqueducts convey virtually all – about 95% – of the water supplied by EBMUD to its 1.3 million customers in its East San Francisco Bay service area. Thus, in a very real sense, the Aqueducts serve as the “lifeline” for the East Bay's residents, institutions, and economy.</p> <p>Although the Aqueducts pass just south of Bacon Island, one of the project islands, the Feasibility Study reports fail to include them in its inventory of facilities on neighboring islands that would be at risk in the event of a levee failure. That is a significant omission that should be corrected in any final Feasibility Study.</p> <p>Some of DWR's own publications contain useful background information on the Aqueducts. For example, the Mokelumne Aqueducts are clearly described in DWR Bulletin 192-82:</p> <p>...the East Bay Municipal Utility District has three large pipelines crossing the Delta and connecting the District's principal sources of water in the Sierra Nevada with its distribution area in Contra Costa and Alameda counties. During the 1981 conference on the “Future of the Delta”, District representatives indicated that its concern with Delta levee vulnerability centers on the immediate effects a levee break might have on continuous operation of these three aqueducts, which cross five tracts in the Delta: Orwood, Woodward, Jones, Roberts, and Sargent-Barnhart. Since these aqueducts rest on piles of timber and concrete, the District is concerned about the effects of a levee break on aqueduct support systems. A levee break too close to an aqueduct river crossing would likely result in extensive scour that could put all three aqueducts out of service for a year. Flooding of adjacent islands might also result in serious damage to aqueduct support systems, but with less time needed to place the system back in service.</p> <p>The concerns expressed at that time by EBMUD were real, not hypothetical. As noted in EBMUD's FYR 1981 Annual Report:</p>

		<p>The seriousness of the Delta problem was illustrated when the aqueducts were nearly submerged last October as a result of levee failure and flooding of the Upper and Lower Jones Tracts. These three large steel pipelines are below sea level for about fifteen miles as they extend across five Delta islands and tracts protected by earthen levees which hold back the Delta waters west of Stockton.</p> <p>Although not damaged, two of the three pipelines were removed from service as a precaution until inspections were completed to determine the impact of the rush of water, and they were back in operation by mid-November. Eroded areas under the aqueducts were filled with sand to stabilize pipeline supports, and by December, the flooded areas had been pumped out.</p> <p>In a presentation to the California Water Commission on December 12, 1980, then DWR Central District Chief Wayne MacRostie included the following description of that year's Jones Tract floods:</p> <p>The break on Lower Jones Tract occurred on September 26 under normal summer conditions. The break through the railroad embankment to Upper Jones Tract occurred on October 23. Although these breaks occurred on nonproject levees, State and Federal Government agencies were called upon to advise in the flood fight and repair activities.</p> <p>Despite this clear record, the Feasibility Study's Draft Report on Risk Analysis, which addresses the costs of repairing or replacing damaged levees, buildings, and infrastructure facilities on neighboring islands, fails to even mention the presence of the 65"-, 67"-, and 87"-diameter EBMUD Mokelumne Aqueducts. This oversight needs to be rectified.</p> <p>Section 3.3.1 of the Report on Risk Analysis should be expanded to include a description of the EBMUD Mokelumne Aqueducts, their importance, and their vulnerability (as detailed above). Tables 5 and 6 of the Risk Analysis report should also be revised to include the Mokelumne Aqueducts and account for their economic value.</p>
2	CDWA SDWA	<p>Failure to include risks to the EBMUD pipelines and other facilities such as the SFPP, LP fuel transmission line and natural gas transmission lines should be corrected. The supporting documents for DWR's Delta Atlas should give a good starting point which of course needs to be updated. The Atlas even has a picture of the East Bay Municipal Utility District Aqueduct. The discussion of</p>

		unquantifiable benefits should include a discussion of unquantifiable detriments.
3	CDWA SDWA	The point raised at the meeting in Walnut Grove that strengthening the levees on the Delta Wetlands Islands in advance of strengthening the other levees in the Delta will increase the risk of flooding to other areas should be included in your analysis. In 1980 both Webb Tract and Holland Tract flooded during the peak of a flood event. There is no doubt that the flooding caused flood elevations in the vicinity to drop thereby relieving the threat to the other levees. The delta levee stability funding has lagged far behind other elements of the CalFed Program.
4	CDWA SDWA	The stated potential risk to human life appears quite low. Highway 12 and Highway 4 both have a lot of traffic and the farming operations on surrounding islands at times employ large numbers of farm workers. There are also a large number of visitors and residents at the various marinas and so-called recreational trailer parks that have possibly been overlooked.

MISCELLANEOUS

1	CUWA (this comment also included in Economics and Water Quality)	We appreciate the hard work and detailed analysis done by DWR in the many components of the planning reports released over the past few months. However, the modeling to date by DWR does not show compliance with the provisions of the agreements. As stated in our February 12, 2002 letter to Bay-Delta Authority Executive Director Patrick Wright (copy attached), decision-makers and others will need an analysis which meets all of the proposed project's water quality requirements and all of its water rights operating restrictions before drawing conclusions regarding project benefits. Since neither the water quality requirements, nor the water rights operating restrictions have been met in the analysis, a true assessment of the project benefits cannot be made at this time. Further, optimistic comments on the feasibility of the project are made in the executive summary and summary report which may be misleading to decision makers if not balanced by comments that acknowledge the severity of constraints to the project by the water quality requirements and operating restrictions, which have been identified in the State draft feasibility studies.
2	EBMUD	In addition to being a feasibility study, the Department's reports serve as a disclosure document for decision makers and a reference document for future phases of project development. As such, it is very important that the reports include all relevant restrictions and conditions under which the project would be constructed and operated. Thus, DWR's In-Delta Storage Program should address how it will meet the PDA's requirements, including its operational, monitoring, and levee design requirements.
3	EBMUD (Last paragraph also in Operations)	<u>Executive Summary</u> Although the EBMUD PDA is mentioned in Section 7.0 of the Draft Executive Summary, it is very much mischaracterized. The summary incorrectly states that the PDA includes "a Water Quality Management Plan" (pg 10). It does not. While other PDAs focused on water quality, specifically the California Urban Water Agencies (CUWA) and Contra Costa Water District (CCWD) PDAs, EBMUD's PDA focused on fishery and levee/seepage issues. It does not contain a water quality management plan. Further, this same paragraph goes on to erroneously state that "The terms and conditions of these PDAs have been incorporated into D1643." That is not entirely true. While

		<p>some of the terms and conditions of the EBMUD PDA were incorporated into D1643, not all were. However, the EBMUD PDA's terms and conditions, "whether or not" included by the SWRCB, remain binding on Delta Wetlands and its successors, as expressly set forth in Section 3 of the PDA.</p> <p>The EBMUD PDA contains terms and conditions that address fishery concerns, levee design concerns, and seepage control issues. These items should be mentioned in Section 7.0 of the Draft Executive Summary. Curiously, this part of the Draft Executive Summary presents information that is not found in any of the draft reports.</p> <p>The EBMUD PDA should be referenced in Sections 1.1, 1.3, and 2.4 of the Draft Report on Operations, as well as in Section 3.2.3 of the Draft Summary Report. Additionally, a more accurate characterization of the EBMUD PDA should be provided in Section 7.0 of the Draft Executive Summary.</p>
4	EBMUD	<p>To the extent DWR assumes that changes to existing permits or agreements, including PDAs, are needed for the project to go forward, the Feasibility Study should identify and discuss the necessary modifications to specific existing permits and agreements. This full evaluation is necessary for decision makers to gain a complete understanding of the permitting and legal challenges the project may entail.</p>
5	PG&E	<p>Lastly we do not believe that the cost of relocating gas transmission from Bacon Island will be a significant addition to the overall long-term cost of the In-Delta storage program. We note that the draft reports prepared for the Feasibility Study apparently assume costs for the relocation of PG&E's gas pipelines on Bacon Island. For example, on Table 5.4 (Summary of In-Delta Storage Project Costs) on page 92 of the latest <u>Draft Summary Report</u>, an entry of \$15 million is show as the cost of "PG&E Pipeline & Electrical Relocation." If additional funds already included in the total project cost and designated for contingency and engineering design, construction management and legal are proportionally added, it is likely that this estimate it is within an order of magnitude of the likely actual cost of the gas pipeline relocation (\$40 million est.). These costs will probably may well be less then many of the stated engineering cost contingencies.</p> <p>Agreement to relocate Line 57B will satisfy all of the PG&E pipeline contingencies that are included in D-1643. This will remove a major existing impediment to any plan to construct a water storage reservoir on Bacon Island in the Delta.</p>

6	Port of Stockton	<p>However, the Port of Stockton, a state chartered agency, has not been invited to participate in the public outreach process or stakeholders committee meetings to date.</p> <p>There appears to be other CALFED funded or supported activities in our region in addition to the Draft In-Delta Storage Program State Feasibility Study. These activities include the Vernalis Adaptive Management Plan (VAMP) and the recent California Bay Delta Authority approved grant to study water quality in the Lower San Joaquin River and the Stockton Ship Channel. The Port does not know the full extent of the CALFED activities, which may have an impact on the present and future operation of our commercial navigation program.</p> <p>The other commercial navigation activities in the CALFED area of activities are the Ports of Sacramento, Benicia, Pittsburg, and Contra Costa County and the Concord Naval Weapons Station. It is not known whether these other navigation interests have been informed on CALFED activities.</p> <p>The Port and the San Francisco District of the Army Corps of Engineers have been engaged in feasibility studies to further deepen the Stockton Ship Channel from 35 feet to a greater depth. Congress has authorized the lower reaches of the ship channel, known as the John F. Baldwin Ship Channel, to a depth of 45 feet. The Corps project manager for our deepening studies is Mr. Dave Patterson at the San Francisco District, telephone 415-977-8707.</p> <p>The Port of Stockton does not oppose the Draft In-Delta Storage Program State Feasibility Study, the VAMP, or CALFED water quality grants. The Port is supportive of CALFED efforts to improve fish passage and water quality in the lower San Joaquin River. The Port is concerned about these ongoing activities and the absence of communications. In the interest of improving the communications process, the Port will have a representative at the next California Bay Delta Authority meeting scheduled for April 7 and 8 in Sacramento.</p> <p>The Port believes an important step in communications would be a briefing on all CALFED supported activities that may impact our commercial navigation interests. The point of contact for the Port would be Mr. Jeff Kasper, Deputy Port Director for Environmental Planning and Facilities. The Port would gladly provide the meeting room and also a tour of our harbor facilities.</p>
7	Port of	We note there has been a substantial public outreach process described in the draft Summary

	Stockton	Report. The Port of Stockton, a state chartered agency, has not been invited to or made aware of the public outreach process or stakeholders committee meetings to date.
8	San Luis & Delta-Mendota Water Authority Westlands Water District	Without a detailed operations plan and a legally enforceable allocation of project benefits, it is not possible to identify specific value to this agency from the In-Delta Project. However, like virtually every agency that depends on diversions from the Delta, our water management plan identifies a need for additional water supply. In addition, we value improvements to supply reliability and water quality. We also value projects that facilitate water transfers. Further analysis of the In-Delta Project will help to clarify the Project's potential value to this and other agencies.
9	Placer County Water Agency (PCWA) & Recreational Boaters of California (RBOC)	<p>General Observation on “Project” title:</p> <p>Over the years, as I have attended meetings on this proposed Project, I’ve been struck by the fact that there are at least two different titles and/or names used to identify this endeavor with resultant differing information circulated or available to the public. One title used is In-Delta Storage Program or Project while the other is The Delta Wetlands Project. I’ve come to learn that the “Storage Project” is the title preferred by CALFED (Federal & State) government officials while the “Wetlands Project” is the titled preferred by a private firm located in Lafayette, California. As I talk with colleagues, they too notice this oddity about this particular Project.</p> <p>Accordingly, to help assure clarity, staff might want to make sure that at public meetings in the future the CALFED materials (“hand outs”) are the ones which are discussed and referenced and if “other” materials or maps are circulated that they are clearly identified from who they originate.</p> <p>With this in mind, my comments below are related to the CALFED “In-Delta Storage Program Feasibility Study (Program)” documents received at the February 25, 2004 public briefing.</p> <p>Water Transfers: EWA:</p> <p>On page 3 of the Draft Executive Summary there is a sentence that reads:</p> <p>“Environmental Water Account (EWA) – In-Delta Storage Project could provide water needed to support the EWA program, enhancing the EWA agencies ability to respond to real-time fisheries needs and would eliminate the need to purchase a substantial portion of water needed by EWA each year.”</p> <p>Frankly, I can not find the facts to support a phrase that this Project will truly and for all times “...eliminate the need to purchase a substantial portion of water needed by EWA each year”. The use of such a phrase for this Project relevant to the EWA and water transfers with out strong</p>

		<p>supporting facts is of concern.</p> <p>I recommend that in this document and all others related to this Project be reviewed and changed by staff so that this Project does not in any manner over-state that with which it can assuredly deliver in the form of real, “wet” water yield on an annual basis from the actual operations of the Project.</p> <p>I recommend that this and any other references in any other Project documents be changed accordingly. An example of such a correction - such as to the above referenced sentence - could be shorten it to read: “Environmental Water Account (EWA) – In-Delta Storage Project could provide water needed to support the EWA program, enhancing the EWA agencies ability to respond to real-time fisheries needs.”</p>
10	SWC	<p>Based on our review of the economic analyses for the project, we do not envision the In-Delta Storage Project fitting into our water supply resource mix, assuming that all the project costs are applied to the delivered per acer-foot yield. We also do not believe that any reasonable level of public subsidy would be high enough to make the project acceptable. In addition to the high project costs and low benefit to cost ratio indicated in the Feasibility Study, we believe that even the stated water supply benefits are optimistic. Our review of the Feasibility Study shows that the operations studies do not fully account for water quality and other operations constraints on the project. As a result, the yield estimates for the project are likely overstated and not supported by the Feasibility Study. In addition, while many potential benefits for the project are briefly mentioned in the study reports, most of the potential benefits have not been quantified or validated through technical studies. Further, it is our assessment that many of the potential benefits will not be possible simultaneously, and would further reduce potential water supply yield from the project.</p>